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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,903	12/24/2003	Yoon-Seop Choi	1793.1020	9166
21171 7550 03/17/2010 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
EXAMINER				
SHIBRU, HELEN				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/743,903

**Applicant(s)**

CHOI, YOON-SEOP

**Examiner**

HELEN SHIBRU

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The amendments filed on 12/14/2009 have been entered and made of record. Claims 1-10 are pending.

***Response to Arguments***

2. Applicant's arguments, filed 12/14/2009, with respect to the rejection(s) of claim(s) 1-10 under have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made. See the rejections sets forth below.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's related art (paragraphs 0003-0005 and figure 1) in view of Miyatake (WO 02/39434) interoperated using the corresponding US PG PUB No. 2004/0047252 and further in view of Kumada (US Pat. No. 5, 469, 220).

Regarding claim 1, Applicant's related art teaches an apparatus that generates a video-reproducing clock signal from a 480 p signal that includes a vertical synchronization signal, horizontal synchronization signals, and copy guard signals (see paragraphs 0003-0004), the apparatus comprising: a clock signal generating unit, which generates horizontal synchronization

signals at the same period as that of the horizontal synchronization signals generated in a previous frame, while a corresponding coast signal is being generated (see paragraph 0005 while the coast signal is being generated artificial horizontal signals are generated with a regular period and input to the PLL, see also figure 1).

Claim 1 differs from Applicant's related art in that the claim further requires a coast signal generating unit, which generates a plurality of coast signals with pulse widths.

In the same field of endeavor Kumada teaches a coast signal generating unit (a first and second window circuits) which generates a plurality of coast signals with pulse width (window signal 1 and window signal 2 are generated with first and second pulse widths), see abstract, col. 20 lines 3-29, figures 4-7 and 17 where the prior art shows a plurality of window signals). Therefore in light of Kumada it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's related art by providing plural coast signals with pulse width in order to stably operate the reproducing device.

Claim 1 further differs from the above combination in that the claim further requires each of which covers the different number of copy guard signals on the basis of the present copy guard signal in one frame signal of the 480 p signal.

In the same field of endeavor Miyatake teaches window generators and window signals (see unit 216, 218, 219 in figure 1, paragraphs 0292, 0332, and 0342). Miyatake further teaches releasing copy guard in the case when all the output signals are not more than a constant threshold value (see paragraph 0191-0197 and claims 25 and 28). Therefore in light of the teaching in Miyatake it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the above combination by providing window signal with different copy guard signal in order to protect the signals from illegal copying.

Regarding claim 2, Kumada teaches a counter that counts falling edges of signals in the present frame signal of the 480p signal (see col. 7 lines 2-14, col. 11-12, and figures 13 and 14) (see also Miyatake paragraphs 0322-0329); and a coast signal generator that generates n coast signals with n different pulse widths on the basis of the counted falling edges of signals (see col. 7 lines 32-col. 6 line 38) and see also Miyatake paragraphs 0423-0426, 0458-0468 and 0490). See the rejection of claim 1 above as well.

Regarding claim 3, claim 3 differs from the proposed combinations of Applicant's prior art in that the claim further requires the coast signal generator generates a first coast signal with a pulse width that covers the number of falling edges and is less than 525, a second coast signal with a pulse width that covers the number of falling edges that ranges from 526 to 535, a third coast signal with a pulse width that covers the number of falling edges that ranges from 536 to 545, and a fourth coast signal with a pulse width that covers the number of falling edges that ranges from 546 to 558. Generating coast signal with a pulse width that covers the number of falling edges from 526-535, 536-545, 546-558 and less than 525 is not novel or produces unexpected result; therefore, merely considered as well known design option obvious to one of ordinary skill in the art because the construction of the apparatus provides no significant functional or patentable differences from the proposed combinations or applicant's apparatus.

Regarding claim 4, Kumada teaches the clock signal generating unit generates a phase locked clock signal using the horizontal synchronization signals, included in the 480p signal,

while the coast signal is not being generated (see col. 6 lines 38-col. 7 line 1 and lines 32-45).

See also rejection of claim 1 above.

Regarding claims 5 and 8, the limitation of claim 5 can be found in claims 1 and 2. Therefore claim 5 is analyzed and rejected for the same reasons as discussed in claims 1 and 2. See also figures 2, 15, 17, abstract, and paragraphs 0247-0248 of Miyatake; and figure 1 and col. 6 of Kumada.

Claims 6 and 9 are rejected for the same reason as discussed in claim 2 above.

Claims 7 and 10 are rejected for the same reasons as discussed in claim 3 above.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 8 is rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent and recent Federal Circuit decisions indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. The claims recite no apparatus or device tied to the limitation.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/  
Examiner, Art Unit 2621  
March 13, 2010